Title (en)
DEPTH MAP BASED PERSPECTIVE CORRECTION IN DIGITAL PHOTOS

Title (de)
PERSPEKTIVENKORREKTUR IN DIGITALFOTOS MITHILFE EINER TIEFENKARTE

Title (fr)
CORRECTION DE LA PERSPECTIVE DES PHOTOS NUMÉRIQUES AVEC L'AIDE D'UNE CARTE DE PROFONDEUR

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Application
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Abstract (en)
[origin: WO2016034709A1] The invention relates to post-processing of a digital photo to correct perspective distortion in the photo. The correction applies a digital photo of a scene and a depth map associated with the photo and comprising, for each pixel in the photo, a depth being a distance between a part of the scene in that pixel and a position of the camera at the time of acquisition. The correction is performed locally, so that the correction of any pixel in the photo depends on the depth of that pixel. The correction can be implemented as a transformation of each pixel in the original photo into a new position in a corrected photo. Afterwards, pixel values has to be calculated for the pixels in the corrected photo using the original pixel values and their new positions. The invention is particularly relevant for photos where objects or scenes involves a large magnification variation, such as selfies, close up photos, and photos when the extension of a large, object is not orthogonal to the optical axis of the camera (low/ high angle shots).

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